

FRANK BARNWELL

Famous Pioneer Designer Loses His Life in an Accident : A Personal Appreciation by the Editor



BRITISH aviation circles were shocked to learn of the death, on August 2, of Bristol's chief aircraft designer, Captain Frank Barnwell, O.B.E., A.F.C., F.R.Ae.S., B.Sc., as a result of a flying accident. During the last couple of years or so Capt. Barnwell had been busy in his spare time on the design of a little low-powered monoplane which he intended for his own use and amusement. Originally he had meant to build the

machine himself, but the vast activity of the Bristol Aeroplane Co. in connection with the R.A.F. expansion naturally meant an ever-increasing load of work on Barnwell's shoulders, and he therefore decided to entrust the construction of the machine to a firm in Bristol. The little monoplane was finished some time ago, and Barnwell had made a few preliminary flights on it.

On the day in question the air was rather bumpy, and it seems likely that the low-powered machine struck a bump which caused it to stall shortly after the take-off. It crashed on to a road on the edge of Bristol airport.

It appears a strange irony of fate that an aircraft designer who had won world-wide fame and had flown since about 1909 all the machines of his own design, including modern military types, should meet his death in a tiny, low-powered aeroplane which he himself regarded merely as an amusing toy.

A Very Human Man

With the death of Capt. Barnwell the Bristol Aeroplane Co. has suffered a loss which is irreparable. There may be designers who are greater technicians in some particular sphere and on some particular aspect of aircraft design, but it can be said quite truthfully that there is no designer who has had the confidence and loyalty of his entire staff to a greater degree. It is literally true that there was not one member of the Bristol staff who would not do anything in the world for Capt. Barnwell. Service was given him, not through fear, for Barnwell was the most gentle of men, but because everyone felt that it was a privilege to be allowed to work for him.

In his work Capt. Barnwell was one of the neatest and most methodical men. It did not matter whether he was doing an elaborate calculation or merely a simple memorandum; they were all written in his peculiar large, neat handwriting and carefully filed away.

As an example of how Barnwell worked, perhaps I may be permitted to quote a personal experience. I had been worrying him for many months to write me an article for our monthly technical supplement, *The Aircraft Engineer*, but he had been far too busy to spare the time. Then one day I received a letter from him informing me that he was doing an article and that I should be receiving it after the Easter holidays. It duly arrived, and I found it to be written entirely in his own handwriting, and all the charts and graphs done by himself. He had spent the Easter holidays doing it at home. I had naturally assumed that in the archives of the Bristol company there would be much material which could be turned into an article, with very little trouble, by his assistants. But no, that was not Barnwell's way. He set to work and did the whole thing himself from A to Z.

It has been my good fortune to know Frank Barnwell since about 1913 or so, and before that I was privileged to count among my friends his brother, Harold Barnwell, who was chief test pilot to Vickers and lost his life in a flying accident in 1917. Although very dissimilar in appearance and in many other respects, the two brothers had in common a charm which made one treasure their friendship. Frank was rather shy and

retiring and would never suffer the limelight of publicity to be pointed in his direction. If asked to write an article or deliver a lecture he usually refused because, as he said, there were lots of people much better qualified than he. And that was not a pose; he meant it quite sincerely. He was modest to a fault.

Born at Lewisham in 1880, Frank Sowter Barnwell was educated at Fettes School, Edinburgh. He served his apprenticeship with a shipbuilding firm and remained in that industry for some years, including a period in America. By 1908 Harold and Frank Barnwell had begun to experiment with aircraft design and construction, and their first monoplane was built near Stirling by the Grampian Motor Co. No great success was achieved with this machine, nor with the next one, built and flown in 1909. By 1911, however, they had produced a monoplane with which Harold made several flights and on which he had more than one crash. That machine, a monoplane, had a flat-twin Grampian engine of about 40 h.p.

About this time the brothers decided to abandon their personal ventures, though not adventures, and Harold joined Vickers, while Frank joined the Bristol company, then called the British and Colonial Aeroplane Co. Harold became chief test pilot and Frank chief draughtsman. With the exception of a short absence in Australia after the war, Frank Barnwell remained with the Bristol company until his death.

Early Successes

Perhaps it can be said that Frank Barnwell laid the foundation of his fame, and that of the Bristol company, with the little Bristol Scout, first exhibited at Olympia in 1914. Harry Busted, now a Group Captain in the R.A.F. and Commandant of No. 3 Elementary and Reserve Flying Training School, Hamble, shared with Barnwell the responsibility for that machine, which was destined to develop into the Bristol Bullet which was used extensively during the war. Most famous of Barnwell's designs of the war period was, perhaps, the Bristol Fighter, which, under the affectionate nickname the "Brisfit," was built and used in enormous numbers.

From the first "Scout" to the latest Blenheim bomber, Bristol aeroplanes have always been characterised by sound design and excellent workmanship. For the former Barnwell was responsible, and the reputation enjoyed by Bristol products all over the world is the best memorial any aircraft designer could possibly have. To the Bristol company and to Mrs. Barnwell and her boys the sympathy of British aviation will be extended in this hour of bereavement. Frank Barnwell was one of the most lovable men I have ever known, and his death has robbed me personally of a very dear friend whose achievements it has been my good fortune to be privileged to record in the pages of *Flight* for more than 25 years. Of few men can it be said that they had no enemies. Of Frank Barnwell it was literally true. Sadness at his death is increased by the fact that I had discussed his little monoplane with him on many occasions and had arranged with him that when he had thoroughly tested it he should, if he were satisfied with it, write a series of articles about how and why he designed it, these articles to form, as it were, an introduction to the subject of aircraft design for the benefit of the younger generation. I did not see him between the time of his first test-flight and the last fatal one, and so we shall never know whether he was satisfied or not. But we may be sure that, with his usual modesty, he would, had he survived, have taken full blame for anything which happened.

C. M. P.

Messages of Condolence

THE following message was sent by Sir Kingsley Wood, Secretary of State for Air, to the widow of Capt. Barnwell:—

"The Air Council have learned with profound regret of the untimely death of your husband, whose name will long be remembered for his pioneer work in the cause of aviation and for the recent services he rendered in the design of aircraft. On the Council's behalf I offer to you an expression of our deepest sympathy in your bereavement."

A message was also sent by Sir Kingsley Wood to the chairman of the Bristol Aeroplane Co., as follows:—

"On behalf of the Air Council I desire to tender expression of our deep regret on learning of the death of Captain Barnwell. His pioneer service in the cause of aviation will long be remembered, and by his tragic death both your company and the nation lose a servant of great distinction."

The funeral took place at Alveston last Saturday.